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ABSTRACT

Virtually all psychological theories assume that early life experiences have an impact on later life choices. However, increasing doubts have been expressed about the universality and permanence of the relationship between women's work and family lives. To explore how early family experiences and early adult decisions affect women's later career achievement, three cohorts of married female college graduates were compared. Path analysis revealed powerful commonalities in the routes to career achievement. The stability of the importance of the number of years worked and the highest degree attained indicate that to achieve in the traditional terms of the workplace means that women must attain higher degrees and avoid dropping out of the workforce. Results suggest that career achievement does not depend on making the "right" decisions at specific "right" times, but does depend on accumulating some combinations of credentials, experience, and freedom from childcare responsibilities over time. In addition, credentials seem to decrease in importance over time, while experience seems to increase. (Author/JAC)

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STUDYING THE EFFECTS OF EARLY EXPERIENCES ON WOMEN'S CAREER ACHIEVEMENT

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Studying the effects of early experiences on women's career achievement

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Virtually all psychological theories assume that early life experiences have an impact on later life choices and outcomes. Researchers investigating the prediction of career persistence and career activity in women (see, e.g., Ginzberg & Associates, 1966) have consistently identified the importance of social class background, whether or not one's mother worked (Hoffman & Nye, 1974), and women's marital, childbearing and childrearing decisions as influencing their work activities. However it is widely believed, at least outside of scholarly circles, that women's work lives are less contingent on their family situations than they once were since it is, at least hypothetically, increasingly possible for women to pursue family and career lives at the same time. Increasing doubts have been expressed (Staines, Pleck, Shepherd & O'Connor, 1978; Chafe, 1977) about the universality and the permanence of the relationship between women's work and family lives. In turn, developmental and life cycle changes, cohort or generational change, and broad social changes have been invoked as possible mediators of the relationship. Cross-sectional studies of single cohorts of women do not allow us to see, let alone untangle, the complex effects of these different changes. Only studies conducted overtime, and across cohorts, especially cohorts that differ in life stage, allow us to identify and clarify the persistent or changing effects of early experiences on later achievements. The present

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secondary analysis of selected work and family variables drawn from two separate studies of educated American women (Ginzberg & Assoicates, 1966; Stewart, 1980) was conducted to examine the effects of early experience on adult women's career achievements. We were particularly interested in the possibility that selected family of origin variables and early adult decisions about career and family might have different consequences in different times. In a related study, Stewart, Lykes & LaFrance (1982) showed that later marriage had important consequences for an older cohort of these women, but not for a younger group. This study explores how early family experiences and early adult decisions affect women's later career achievement.

Method

Sample. Subjects for the study were married females who graduated from a prestigious New England women's college in 1964 and attended graduate school within the 10 year period subsequent to their graduation (that is, at the time data were first collected) and two groups of married females who were graduate students at an elite New York university between 1945 and 1951. These three cohorts are in no way representative of the general female population. They are almost exclusively white and from the better educated, upper socioeconomic strata of our society. However, these three samples do represent women educated from the post World War II period to the period of the second wave of the women's movement, that is, the 1970s. In addition, each cohort was interviewed at two points in time, between 1963 and 1980. Although not representative samples, this combination of a number of data sets at several points in time provides a unique opportunity to compare relationships between comparable work and family variables measured with different cohorts and at different time periods, thus increasing the generalizability of the findings. Further, there is some evidence (see,

e.g., Maas & Kuypers, 1974) to suggest a high degree of variability in life patterns even in women of similar education, intelligence, and social class.

In the spring of 1974 the graduates of a New England college were sent a questionnaire requesting brief background information, information about their marital and family status, their occupation, a detailed year by year account of activities in the last 10 years and a few questions about college experiences and future goals. Of the 156 graduates for whom adequate addresses were available from the college alumane office, 122 or 78% responded to the questionnaire. The sixty-nine who attended graduate school were subselected from this number for the present study to insure a more comparable sample to the New York groups. These subjects received a follow-up questionnaire in 1979 and 49 subjects (or 71 % of this sample) returned these questionnaires which included information about their work and family life between 1974 and 1979.

Additional subjects were female fellowship recipients and members of honorary societies selected from among those women graduate students enrolled in academic departments and professional schools at a New York university between 1945 and 1951. Two hundred and thirty-eight women constituted the sample for the first wave of the study (a response rate of 75%) and 169 (71%) of the original respondents were available for the second wave 12 years later. Analysis of the non-response bias of the second sample, based on the data collected in the first survey, indicated no differences between those who were and were not followed up. Because the age range in this sample was so great, and in the New England sample it was not, we divided this sample into two birth cohorts (one with a mean age

of 39, the other of 46, in 1963), thus creating three separate cohorts, that is, New England, New York 1, and New York 2.

The present secondary analysis of selected work and family variables was conducted with three cohorts of highly educated American women. The youngest cohort (N.E.) includes 69 married women whose mean age in 1974 was 31. The second cohort is the younger cohort of the New York sample (N.Y.1) and includes 71 married women whose mean age in 1963 was 38 years. The third cohort (N.Y.2) includes 51 married women whose mean age in 1963 was 46 years. All three cohorts were contacted at two points in time, so relationships between the variables of interest can be examined over time for their direct and indirect effects on women's career achievement. These three cohorts are comparable on major demographic variables, such as parents' socioeconomic status, husband's education and occupation and subject's education, suggesting that the analyses of selected work and family variables would yield useful comparisons.

Conceptualizing women's career achievement poses complicated problems for the researcher. No single adequate measure of women's career achievement exists, and most that are used either equate women's and men's achievement, using the same scale, or assess women's achievement on scales which are not comparable to those used to assess men's. Because an adequate measure would require a great deal of information not available to us and because these particular cohorts all obtained graduate education and many pursued "traditionally male career ladders", if not traditionally male occupations per se, we have adopted the measures used in the original studies. For all three cohorts this consists of ordinal scales with not working and part time work at the lower end of the scale and high achievement as the maximum score. For the New England cohort a higher score reflects nontraditional

work, while for the New York cohorts high achievement combines an assessment (by the coder) of the prestige of the occupation held, level of attainment within it, and employer prestige. Although these indicators seem appropriate given this sample, it is clear that the kind of career achievement discussed in this study is only one kind of "achievement" and may be differentially appropriate for understanding the work lives of women within this sample as well as those of women of other backgrounds and values.

Variables selected to assess early experiences included parents' socio-economic status and whether or not the mother worked. Adult experiences examined included the timing of marriage, the timing of decisions about work or graduate school, the highest degree attained, childrearing responsibilities, and the number of years worked. Identical or comparable measures of each of these variables were available for each cohort.

Initial analyses involved the examination of the patterns of relationships between specific variables at specific points in time. Conventional wisdom suggests that all of these variables make a difference in women's career achievement. However, it is not clear how or why some variables have short term effects but no long term consequences. Equally, it is possible that some variables have important long term or indirect consequences but no immediate or direct effects. This is particularly important in teasing out the possible differential effects of the timing of early adult family and work decisions on later adult work-related outcomes. In short, examination of variables such as these at a single point in time may be misleading, given that women's family and career lives may be related in complex ways over time.

In order to tease out some of these over-time relationships we performed

path analyses for all three cohorts using variables drawn to reflect selected career and family experiences over the course of the subject's life. Our dependent variable for these analyses was achievement level, since that variable best reflected the cumulated career "success" of the woman to that point. The "predictor" variables were selected background variables, including parents' socio-economic status, and whether or not mother worked, selected early adult decisions, including timing of marriage, work and graduate school, and major attainments, including child care responsibilities, highest degree, and total number of years of labor force participation. A reasonable model of the relationship between background variables and adult career and family variables for married women suggests that family socio-economic status would affect whether or not mother worked and that both would affect the subject's decisions about marriage and work and/or graduate school. These early decisions might affect one's child rearing responsibilities, or more specifically, the age of one's youngest children in the home, one's highest degree attained, and one's labor force participation which might then predict career achievement. Alternatively, family background variables and early decisions might have direct effects on women's achievement or no effects at all.

These analyses were conducted for three separate cohorts at two points in time. The timing of graduate school and of first employment cannot be entered into the same path analysis as they cannot be sequentially ordered in the same way for all subjects. (That is, some were employed first, others attended graduate school; still others did neither.) However, as both are important for better understanding these relationships and perhaps differentially predictive for different groups at different times, separate

path analyses were done using each of them as a predictor. There were therefore 12 separate path analyses, two for each cohort at each point in time. Although a seemingly unwieldy number of analyses we remind you that they reflect analyses with three separate groups at two points in time. From examining the relationships of these variables for the same women at different points in time and for three different cohorts we expected to identify more clearly the stability and/or change in the importance of selected career and family variables in directly and indirectly predicting career achievement.

Results for these 12 path analyses will be presented in summary here to illustrate a way of looking at questions having to do with direct and indirect effects on a single outcome and to describe the differential predictive role of selected background work and family related variables on women's career achievement. As such they provide some evidence of the relative importance or salience of different variables in predicting women's career achievement at different points in time. Summary table 2 presents all significant direct or indirect paths and indicates the direction of the relationship, i.e. positive or negative.

Results

Examining the simple correlations between background and early adult experiences and career achievement level in 1963 and 1975 reveals several similarities and some differences (see Table 1). Most notably, child care responsibilities, highest degree, and number of years worked correlate significantly with career achievement for all three cohorts at both points in time. Whether or not one's mother worked also significantly and directly predicts career achievement for the youngest cohort and for the older New York group at time 2. The timing of one's first job relates significantly to

career achievement for the New York groups at time 2 and for the younger N.Y. group at time 1. Further, early attendance at graduate school negatively predicts achievement for both New York groups in 1975. However, examination of these simple correlations does not enable us to clarify the specific interrelations between many of these variables, controlling for the influence of others, nor to tease out the indirect effects of background and early decisions over time.

Path analyses confirmed the predictive power of attaining a higher degree and working longer as important to career achievement for all three cohorts. Specifically, examination of the multiple R of the regression equations with all variables entered (see Table 1) shows that the variables under investigation are strong and consistent predictors of achievement. Examination of the paths provides evidence of direct and indirect effects on career achievement. As Table 2 shows there is more consistency than change in the predictive power of these variables for the three cohorts. (N.B. As indicated in your table, all direct and indirect paths reported were found in both paths done for each cohort, that is those with early labor force experience and those with early graduate school, each separately entered. Significant paths from the analyses with early labor force participation only are indicated by a single parentheses ( ), and those with early graduate school only are indicated by double parentheses (( )). Background variables, which showed relatively few direct relations with achievement, predict career achievement indirectly for all groups at both points in time. More specifically, parents' socioeconomic background predicts mother working negatively and significantly for the New England cohort and for the younger New York group, whereas it positively predicts childcare responsibility and either highest degree or labor force participation for the older New York cohort. In addi-

tion, mother's having worked predicts attaining a higher degree (for N.E.) or longer and/or earlier labor force participation (for N.Y.) and directly predicts achievement for the older N.Y. cohort in 1975. Family background variables are clearly indirectly influential in women's career achievement, and there is some similarity in the variables which mediate the relationships between them and career achievement, at least for the younger two cohorts.

Timing of early decisions (marriage, work, graduate school) are of relatively less importance than background experiences or attainments in predicting women's career achievement. The timing of one's marriage has a direct effect on child care responsibilities for the NE cohort at time 1 but this is not found in the other groups or in NE at time 2, suggesting that this is a developmental effect. (This could be more firmly established if we had data from NY 1 and 2 at earlier points in their development.) In addition the timing of marriage does predict labor force participation or attainment of a higher degree for the younger NY cohort. These relationships are not found in either other cohort and may reflect a relationship specific to this cohort. However these relationships are not significant at time 1 for this group suggesting a cohort specific developmental effect; there is unfortunately, insufficient information to clearly interpret them in this way. The only direct effects of early decisions on career achievement are for early graduate school in NY 1 at time 2 and early work for NY 2 at time 2, both of which negatively predict achievement. Examination of other path correlates and of simply correlations reveal that early graduate school predicts attainment of a higher degree for NY 1, and then achievement, and early work predicts longer work force participation for NY 2, and then achievement. The negative path relationships may describe those persons

who did not finish graduate degrees and those who dropped out of the labor force, both of whom are low career achievers. Finishing one's degree and staying in the labor force therefore seem more significant than when one begins either.

The paths confirm the direct effect of attainments on career achievement. Child care responsibilities and highest degree attained predict career achievement for all three cohorts at both points in time. Total labor force participation predicts career achievement for NY 1 at both points in time, NE at time 1 and NY2 at time 2. The absence of a relationship between total labor force participation and achievement at two points can be explained in part by examining the regression equations and simple correlations. For both NE at time 2 and NY at time 1 total years of work significantly correlate with achievement. However, for both groups this relationship and the variance accounted for is swamped by the strength of relationships of the other two attainment variables and achievement, that is childcare responsibilities and highest degree attained.

Closer examination of the variance accounted for by these attainment variables reveals that the relative importance of each of these attainments shifts over time (see Table 3). For all three cohorts highest degree attained accounts for more than twice as much of the variance in achievement at the first point in time than at the second. For both NY cohorts the variance accounted for by labor force participation increases dramatically from time 1 to time 2 whereas the variance accounted for by child care responsibilities decreases between time 1 and time 2. For NE it decreases from time 1 to time 2 but remains relatively high, and higher than that accounted for by labor force participation. This cohort is still relatively younger than the other two groups and more likely to still have childrearing

responsibilities for young children. Additional information collected at a third time point might confirm the trend indentified in the NY cohorts for the NE cohort, that is, data collected at an age when they are more comparable to the ages of NY cohorts 1 or 2 at time 2. In sum, although all three attainment variables correlate significantly with career achievement, the strength of these relationships and therefore the variance accounted for by them differs at different points in time, with child care responsibilities and credentialling (i.e. highest degree attained) becoming less important and work force participation becoming more important in explaining career achievement.

Summary and Implications

Evidence from these analyses suggests that there are powerful commonalities in the routes to career achievement in these three cohorts of highly educated women. The stability of the importance of years worked and highest degree attained suggest that to achieve in the long run, at least as defined more traditionally in terms of the workplace, women must attain higher degrees and avoid dropping out of the work force.

Perhaps it is not surprising that attainment of high degrees or labor force experience are important predictors of women's career achievement in all of our analyses. And it is not very surprising that career achievement is affected, for all groups, by the presence of young children at home. It is a bit more surprising that in most of our analyses very early life experiences, especially exposure to a working mother, had longterm consequences for career achievement. What is most surprising, though, is that early decisions about work and graduate school do not seem to have important long-term consequences.

Apparently, when women begin graduate school is far less important than that they finish it. Similarly, when they begin to gain labor force experience is less important than that they gain a lot of it. In short, it seems clear that women's career achievement does not depend on making the "right" decisions at specific "right" times, but does depend on accumulating some mixture of credentials, experience and/or freedom from childcare responsibilities over time. Finally, credentials seem to decrease in importance over time and experience seems to increase.

We began these analyses to investigate changes in the effects of background experiences and early decisions on women's acheivement. Instead we found powerful commonalities. Perhaps career achievement in women really is a function of certain very broad experiences, regardless of time and place. On the the other hand, perhaps in these elite samples we see the effects of social changes for women very quickly. In order to study the changes more directly, perhaps we need to explore even earlier cohorts of well-educated women. Alternatively, less elite samples might be more appropriate for investigating the impact of social change on the prediction of women's career achievement.

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Table 1

Simple Correlations with Career Achievement[7]

Sample:	New England		New York 1		New York 2	
Year of Data Collection:	1974	1980	1963	1975	1963	1975
N:	60	49	71	71	51	51
Mean Age:	31	37	38	50	46	58
Variables:						
Background						
Parents' SES[2]	.07	-.12	-.06	-.06	.06	.04
Mother work history[3]	.31*	.36*	.09	.10	.12	.22[t]
Early Decisions						
Timing of Marriage[4]	.12	-.09	-.02	.02	.14	.01
Early labor force experience[5]	-.10	-.12	.37**	.30*	.18	.25[t]
Early graduate school[5]	.13	.07	-.17	-.30*	-.21	-.26[t]
Attainments[1]						
Childcare responsibilities[6]	-.44***	-.28[t]	-.46***	-.19	-.50***	-.38**
Highest Degree	.61***	.53***	.47***	.40***	.58***	.32*
Total labor force participation	.38**	.32*	.57***	.74***	.36*	.57***
Multiple R	.81***	.63**(.62)	.73***	.78***(.77)	.73**(.74)	.68***(.70)

[t]p=.10 *p=.05 **p=.01 ***p=.001

NOTE: Correlations of the same magnitudes may differ in level of significance due to different Ns; figures in parentheses represent regressions using early labor force and differ slightly from those reported which use early graduate experience.

[1]Coded to time of same data collection as career achievement used in any given analysis.

[2]Coded using Hollingshead & Redlich occupational scale of 1-7, with 1 as low and 7 as high.

[3]Coded as follows: 1=never/2=sometimes/3=always.

[4]Coded as follows: 1=year after BA/2=2-4 years after BA/3=>4 years after BA.

Table 1 Footnotes (Continued)

[5]Coded as follows: 1=late/2=soon after BA (for N.E. within 1 year; for NY 1 and 2 within 5 years)

[6]Coded as follows: 1=no children/2=youngest child 12 years and older/3=youngest child 6-12/4= youngest child 5 years and under.

[7]Coded as follows: for New England: 1=not working/2=part-time working/3=traditionally female work/4=nontraditional work.
for New York 1 & 2: 1=not working/2=low/3=medium/4=good/5=high.

Table 2

Direct and Indirect Predictors of Women's Career Achievements:
Summary of Path Analyses

Sample	New England		New York 1		New York 2	
Year of Data Collection	1974	1980	1963	1975	1963	1975
Mean Age	31 years old	37 years old	38 years old	50 years old	46 years old	58 years old
VARIABLES						
Background: Parents SES (SES)	Indirect: MOMWK(-)	Indirect: MOMWK(-)	((Indirect: MOMWK(-))	Indirect: MOMWK(-)	Indirect: KIDCARE(+) HIDEG(+)	Indirect: KIDCARE(+) LFP(+)
Mother work history(MOMWK)	Indirect: HIDEG(+)	Indirect: HIDEG(+)	((Indirect: LFP(+)))	Indirect: ((LFP(+))) (LABOR(+))		DIRECT(+)
Early Decisions:						
Timing of Marriage	Indirect: KIDCARE(-)			Indirect: ((LFP(+))) (HIDEG(-))		
Early Labor force experience(LABOR)	(Indirect: LFP(+))		(Indirect: LFP(+))	(Indirect: LFP(+))		(Indirect: LFP(+) KIDCARE(-)) (DIRECT(-))
Early Graduate school (GRAD)	((Indirect: LFP(-)))		((Indirect: LFP(-) HIDEG(+)))	((Indirect: LFP(-) HIDEG(+))) ((DIRECT(-)))		((Indirect: LFP(-) KIDCARE(+))
Attainment:[1]						
Childcare Responsibility (KIDCARE)	Indirect: LFP(-) DIRECT (-)	DIRECT(-)	Indirect: ((HIDEG(-))) (LFP(-)) DIRECT (-)	Indirect: LFP(-)	Indirect: HIDEG(-) DIRECT (-)	Indirect: HIDEG(-) LFP(-)
Highest degree (HIDEG)	DIRECT(+)	DIRECT(+)	((Indirect: LFP(+))) DIRECT (+)	Indirect: LFP(+) DIRECT (+)	DIRECT(+)	DIRECT(+)
Total Laborforce participation (LFP)	DIRECT(+)		DIRECT(+)	DIRECT(+)		DIRECT(+)

Table 2 Footnotes

NOTE: Only significant paths are reported and the direction of the standardized regression coefficient is noted in parentheses. Direct and indirect paths reported were found both in regressions done with LABOR and with GRAD separately. Significant paths from the regressions with Labor only are indicated by single parentheses ( ) and those which are significant only in regressions with GRAD are indicated by double parentheses (( )).

[1]Coded to time of same data collection as career achievement used in any given analysis.

Table 3

Variance in Career Achievement accounted for by Selected Family and Work Related Attainments

Sample	New England		New York 1		New York 2	
Year of data collection	1974	1980	1963	1975	1963	1975
N	60	49	71	81	51	51
Mean age	31	37	38	50	46	58
Variables[1]						
Childcare responsibilities	11%(11%)	6%(6%)	9%(8%)	0%(0%)	7%(8%)	0% (0%)
Highest degree	26%(26%)	13%(13%)	7%(9%)	3%(5%)	21%(21%)	8% (8%)
Labor Force Participation	7%(7%)	2%(2%)	7%(9%)	31%(19%)	1%(1%)	23% (17%)

NOTE: Unique variance reported from regressions including early graduate school as a predictor are in parentheses ( ). Other figures reported are from regressions including early work experience as a predictor.

[1]Coded to time of same data collection as career achievement variable used in any given analysis.